

# Jain Integrated Automation System

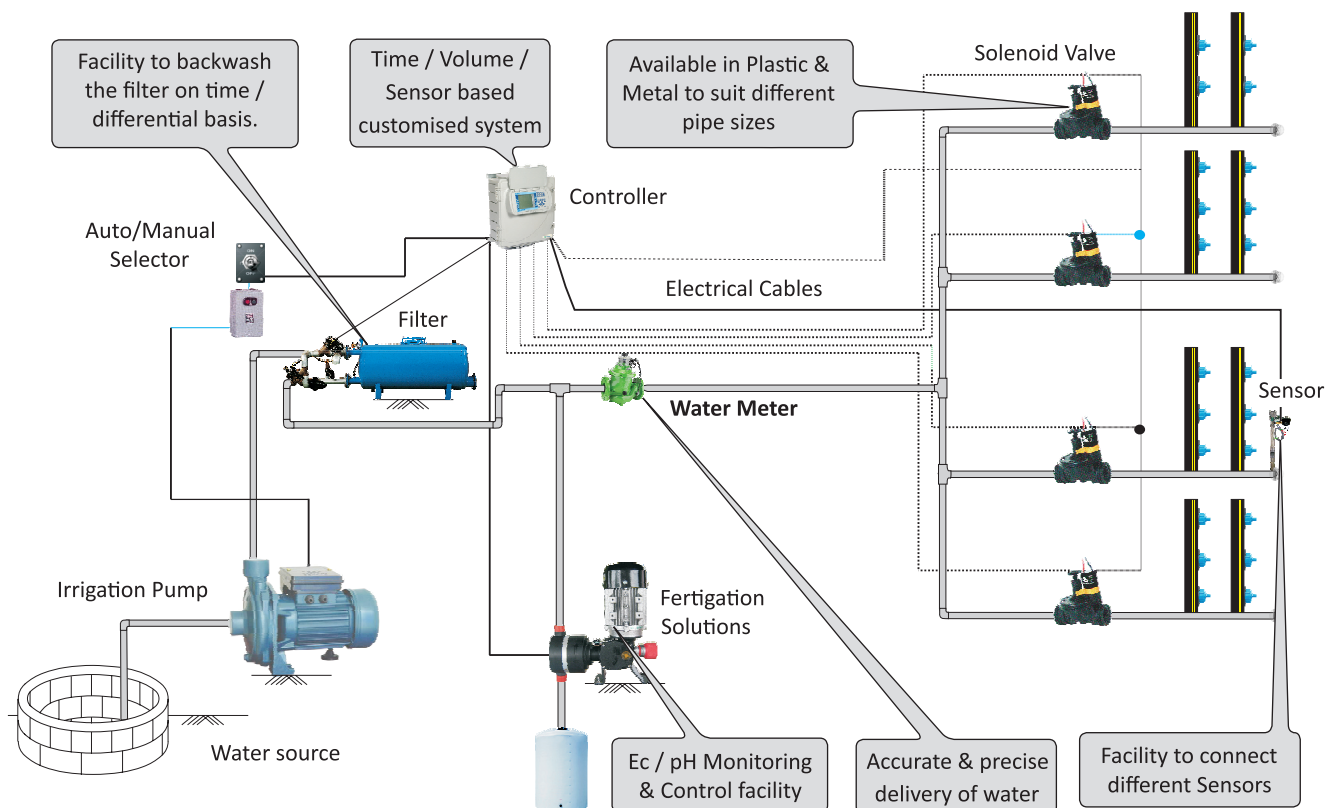
## Concept of Jain Integrated Automation System

Automation of an irrigation system refers to operation of the system with no or minimum manual intervention. The introduction of automation in irrigation system has increased application efficiency and drastically reduced labour requirement.

## Advantages of Automation Systems

- Conservation of water and labour
- System and operational flexibility
- Increased efficiency of water and fertilizer use.
- Systems can be operated at night.
- Savings in energy, cost and water.

**Applications :** • Solar Powered Drip Irrigation System • Sprinkler Irrigation Systems • Dust Suppression Systems • Greenhouse and Nurseries • Landscape Irrigation • Golf Irrigation • Turf & Sports • Lift Irrigation & Canal Command Network • On Demand Irrigation • Drinking Water supply schemes



## Types of automation

### Time-based system

In this system, time is the basis for operation. The basic objective is to prepare a schedule based on crop water requirements. The operation sequence will be set by user as desired.



### Volume-based system

In this type, every section will receive the preset volume of water. This is possible with the help of following two methods:

- Electronic
- Mechanical



### Sensor-based system

In this system, sensors give feedback to controller, depending on which the controller initiates various actions as required.



### Solenoid valves / Hydraulic valves with pilot

- Heavy Duty solenoid pilot valve
- Flow Control with non rising handle
- Rigid-Diaphragm support
- Pressure regulator compatible
- Available in 24 VAC & 12 VDC options



## Fertigation Solutions

### Dosing Pump

- Operation in Pulse type
- Dosing flow is adjustable
- High chemical resistance
- Easy installation
- Available in different ranges (50,100, 200, 300, 500, 1000 lph)



### Fertijet (Bypass System)

- This machine injects liquid fertilizers in the mainline. Since this machine injects from outside, it is called as bypass system.
- It has a Ec/pH monitor & electronic venturies, which are connected to controller.
- This machine can fit easily on the existing system also, with range from 1" to 4".



### Fertimix (Mixer System)

- This is an inline system. Water & fertilizers are mixed in the tank.
- The machine has Ec & pH monitors & electronic venturies. After desired mixing, the solution is pumped to the field.
- Standard models available are 9, 25, 35 & 60 cubic meters / hr. at 2.5-3 bar.



Jain Plastic Park, P.O. Box 72, Jalgaon - 425001. Tel : +91-257-2250011; Fax: +91-257-2258111;  
E-mail : jisl@jains.com; Web: www.jains.com

